

REMARKS

Applicant has reviewed and considered the Office Action mailed on July 25, 2007 and the references cited therein.

Claims 1, 5-6, 10-11, 27, 30, 36, and 38 are amended, claims 3, 17-26, 28-29, 31-33, and 37 are canceled, and no claims are added. As a result, claims 1-2, 4-16, 27, 30, 34-36, 38 are now pending in this application.

Election/Restriction

Restriction to one of the following inventions was required under 35 U.S.C. 121:

- I. Claims 1-17, 27-36, and 38, drawn to a wireless access point for receiving, storing, and transmitting service signal comprising service information, classified in class 370, subclass 338.
- II. Claims 18-26 and 37, drawn to a wireless client device for receiving and displaying service availability information during power save mode, classified in class 370, subclass 311.

Applicants hereby affirm the provisional election of the invention of Group I (claims 1-17, 27-36, and 38). The claims of the invention of Group II (claims 18-26 and 37) have been canceled herein without prejudice. Applicants reserve the right to pursue these claims in a future application.

35 USC § 102 Rejection of the Claims

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claims 1, 3-6, 8, 10, 36 and 38 were rejected under 35 USC § 102(b) as being anticipated by *Hild et al.* (EP 1,022,876A1) (hereinafter Hild).

Claim 1 is an independent claim directed to a wireless access point comprising: (a) a memory to store information relating to services available in an associated network; (b) a wireless transceiver to provide wireless communication with one or more wireless client devices; and (c) a controller to generate a services signal using service related information from said memory and to cause said wireless transceiver to transmit said services signal; wherein said services signal is transmitted as part of a beacon signal transmitted by said wireless transceiver.

Hild does not disclose or suggest “wherein said services signal is transmitted as part of a beacon signal transmitted by said wireless transceiver.” The Examiner takes the position that Hild discloses the transmission of a services signal as part of a beacon signal in paragraphs [0039] and [0047]. The Applicants respectfully disagree. Neither of these paragraphs mentions the use of beacon signals to transmit services signals. In fact, the word “beacon” does not appear anywhere within Hild. If the Examiner maintains this rejection, it is respectfully requested that he describe with specificity his reasoning as to the disclosure of a beacon signal in Hild.

Based on the foregoing, it is submitted that claim 1 is not anticipated by Hild.

Claim 36 is an independent claim directed to a system comprising: (a) a wireless access point including: (i) a memory to store information relating to services available in an associated network; (ii) a wireless transceiver to provide wireless communication with one or more wireless client devices; and (iii) a controller to generate a services signal using information from said memory and to cause said wireless transceiver to transmit said services signal, wherein said controller includes a service abstraction unit to parse service information received from service discovery servers and store said service information in said memory in a predetermined format, said service abstraction unit having plug-in interfaces to accept service discovery plug-ins; and

(b) a portable computer to receive the services signal from said wireless transceiver and to display network service information to a user of the portable computer based thereon.

Hild does not disclose or suggest a controller including “a service abstraction unit to parse service information received from service discovery servers and store said service information in said memory in a predetermined format, said service abstraction unit having plug-in interfaces to accept service discovery plug-ins.”

Based on the foregoing, it is submitted that claim 36 is not anticipated by Hild.

Claims 4-6, 8, and 10 and claim 38 are dependent claims that depend either directly or indirectly from independent claims 1 and 36, respectively. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims. These claims also provide further bases for patentability. For example, claims 5 further defines the “services signal” of claim 4 as including “one or more information elements within said frame body of said MAC frame, wherein said wireless access point is for use within a network following the IEEE 802.11 wireless standard and said one or more information elements includes one or more of the reserved information elements having ID numbers 32-255 within a frame body of an IEEE 802.11 management frame.” Hild does not disclose or suggest the use of such information elements to transmit a services signal. A similar argument applies to dependent claim 38. Claim 6 further defines the “frame body of said MAC frame” of claim 5 to include “an advertising interval that is being used to advertise a particular service.” Hild does not disclose or suggest the inclusion of such an advertising interval within the frame body of a MAC frame. Claim 10 further defines the controller of claim 1 as being “programmed to broadcast services signals at fixed intervals.” Hild does not disclose or suggest broadcasting services signals at fixed intervals.

Claim 3 has been canceled without prejudice.

Claims 1, 2, 11, 12, 27-29 and 36 were rejected under 35 USC § 102(e) as being anticipated by *Karhu* (US Publication No. 2004/0199616)(hereinafter Karhu).

Claim 1 is set out above. Karhu does not disclose or suggest “wherein said services signal is transmitted as part of a beacon signal transmitted by said wireless transceiver.”

Based on the foregoing, it is submitted that claim 1 is not anticipated by Karhu. Reconsideration and allowance of claim 1 is therefore respectfully requested.

Claim 11 is an independent claim directed to a wireless access point, comprising: (a) a memory; and (b) a controller to receive information about services available within an associated network from at least one service discovery server and to store the information within the memory, wherein said controller includes a service abstraction unit to parse service information received from said at least one service discovery server and store said service information in said memory in a predetermined format, said service abstraction unit having interfaces to accept service discovery plug-ins.

Karhu does not disclose or suggest a controller having a service abstraction unit “having interfaces to accept service discovery plug-ins.” Claim 36 should be allowable for similar reasons.

Based on the foregoing, it is submitted that claims 11 and 36 are not anticipated by Karhu. Reconsideration and allowance of these claims is therefore respectfully requested.

Claim 27 is an independent claim directed to a method comprising: (a) receiving information relating to services available within a network from one or more service discovery servers; (b) storing the information within a memory in a wireless access point; (c) generating a services signal to be wirelessly transmitted in the network, using information stored in the memory; and (d) transmitting said services signal within an information field of a frame body of an IEEE 802.11 MAC frame to wireless client devices within a coverage area of the wireless access point, wherein said services signal is included within one or more of the reserved information elements having ID numbers 32-255.

Karhu does not disclose or suggest the transmission of a services signal “within an information field of a frame body of an IEEE 802.11 MAC frame to wireless client devices within a coverage area of the wireless access point, wherein said services signal is included within one or more of the reserved information elements having ID numbers 32-255.”

Based on the foregoing, it is submitted that claim 27 is not anticipated by Karhu. Reconsideration and allowance of claim 27 is therefore respectfully requested.

Claim 2 and claim 12 are dependent claims that depend directly from independent claims 1 and 11, respectively. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims.

Claims 28-29 have been canceled without prejudice.

35 USC § 103 Rejection of the Claims

Claims 2, 9, 11-13, 15-17, 27-33 and 35 were rejected under 35 USC § 103(a) as being unpatentable over *Hild et al.* (EP 1,022,876A1) in view of *Moore et al.* (US Publication No. 2003/0027525).

Claim 11 is set out above. Neither Moore nor Hild disclose or suggest, either alone or in combination, a controller having a service abstraction unit “having interfaces to accept service discovery plug-ins.”

Based on the foregoing, it is submitted that claim 11 is allowable over the combination of Moore and Hild. Reconsideration and allowance of claim 11 is therefore respectfully requested.

Claim 27 is set out above. Neither Moore nor Hild disclose or suggest, either alone or in combination, the transmission of a services signal “within an information field of a frame body of an IEEE 802.11 MAC frame to wireless client devices within a coverage area of the wireless access point, wherein said services signal is included within one or more of the reserved information elements having ID numbers 32-255.”

Based on the foregoing, it is submitted that claim 27 is allowable over the combination of Moore and Hild. Reconsideration and allowance of claim 27 is therefore respectfully requested.

Claims 2 and 9, claims 12-13 and 15-16, claims 30 and 35 are dependent claims that depend either directly or indirectly from independent claims 1, 11, and 27, respectively. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims. These claims also provide at least one additional basis for patentability. For example, claim 30 further defines the “IEEE 802.11 MAC frame” of claim 27 as being “a beacon frame.” Neither Moore nor Hild disclose or suggest, either alone or in combination, the transmission of a services signal within an IEEE 802.11 beacon frame.

Claims 17, 28-29, and 31-33 have been canceled without prejudice.

Claims 7, 14 and 34 were rejected under 35 USC § 103(a) as being unpatentable over Hild in view of *Czerwinski et al.* (“An Architecture for a Secure Service Discovery Service”, Mobicom’99, Proceeding of the 5th Annual ACM/IEEE International Conference on Mobile Computing and Networking, August 15, 1999, pages 24-35).

Claim 7, claim 14, and claim 34 are dependent claims that depend either directly or indirectly from independent claims 1, 11, and 27, respectively. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims.

The present office action relies upon at least one 35 USC § 102(a) or 35 USC § 102(e) reference. Please note that no part of the present response is to be deemed an admission that any such reference is valid prior art in the present application. As such, the Applicants reserve the right to swear behind any such reference at a later date.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (480-948-3745) to facilitate prosecution of this application.

Respectfully submitted,

JR-SHIAN TSAI ET AL.

By their Representatives,

Customer Number: 45643
480-948-3745

Date: November 26, 2007

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26th day of November, 2007.

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